

This listing of claims will replace all prior versions, and listings, of claims in the application.

**Listing of Claims:**

1. (Cancelled)

2. (Cancelled)

3. (Cancelled)

4. (Cancelled)

5. (Currently Amended) [The method according to claim 4, further comprising the steps of:] A method for facilitating wavelength-specific and packet-switched routing comprising the steps of:

demultiplexing wavelengths propagating on a primary metropolitan fiber ring;

reading a packet header of a packet contained within one of said wavelengths,

said packet header having a destination address;

accessing a look-up table;

determining if said destination address matches a local address contained in said

look-up table;

switching said packet based on a result of said determining step;

directing, by a switch controller circuit, said packets to a customer's premises via a distribution node;

electrically detecting optically transported data generated at said customer's

premises;

packetizing said data generated at said customer's premises;

reading a packet header contained within said packetized data;

assigning said packetized data to a wavelength in such a manner so as to avoid a

"crash" with a wavelength in use by other system components;

multiplexing other locally generated packets with said packetized data;

remultiplexing said multiplexed packets into an ongoing wavelength channel; and

directing said ongoing wavelength channel downstream to a further primary

distribution/aggregation node.

6. (Currently Amended) [The method according to claim 4, further comprising the steps of:] A method for facilitating wavelength-specific and packet-switched routing comprising the steps of:

demultiplexing wavelengths propagating on a primary metropolitan fiber ring;

reading a packet header of a packet contained within one of said wavelengths,

said packet header having a destination address;

accessing a look-up table;

determining if said destination address matches a local address contained in said

look-up table;

switching said packet based on a result of said determining step;

directing, by a switch controller circuit, said packets to a customer's premises via a distribution node;

electrically detecting optically transported data generated at said customer's

premises;

packetizing said data generated at said customer's premises;

reading a packet header contained within said packetized data;

assigning said packetized data to a wavelength in such a manner so as to avoid a

"crash" with a wavelength in use by other system components;

directing said assigned wavelength containing said packetized data to another

customer via a wavelength packet cross-connect.

7. (Cancelled)

8. (Cancelled)

9. (Cancelled)

10. (Currently Amended) [The method according to claim 4,] A method for facilitating wavelength-specific and packet-switched routing comprising the steps of:

demultiplexing wavelengths propagating on a primary metropolitan fiber ring;

reading a packet header of a packet contained within one of said wavelengths,

said packet header having a destination address;

accessing a look-up table;

determining if said destination address matches a local address contained in said

look-up table;

switching said packet based on a result of said determining step;

directing, by a switch controller circuit, said packets to a customer's premises via a distribution node;

detecting a data rate and a wavelength generated at said customer's premises;

optionally converting said wavelength to another wavelength in such a manner so as to avoid a "crash" with a wavelength in use by other system components; and

directing said optionally converted wavelength upstream to a further primary distribution/aggregation node.

11. (Original) The method according to claim 10, further comprising the step of inserting said optionally converted wavelength into an upstream channel.

12. (Cancelled)

13. (Cancelled)

14. (Cancelled)

15. (Cancelled)

16. (Cancelled)

17. (Cancelled)

18. (Cancelled)

19. (Cancelled)

20. (Cancelled)

21. (Cancelled)

22. (Cancelled)

23. (Cancelled)

24. (Original) A method of aggregating packet-switched data for propagation on a primary metropolitan fiber ring comprising the steps of:

generating packet-switched data at a customer's premises;

aggregating said packet-switched data into a tertiary aggregation node;

directing said aggregated packet-switched data to a secondary aggregation node;

further aggregating said packet-switched data received from said tertiary aggregation node;

directing said packet-switched data to a primary distribution/aggregation node;

multiplexing said packet-switched data onto wavelengths assigned so as not to "crash" with other wavelengths in use by other system components;

remultiplexing said assigned wavelengths into a bundle of wavelengths;

and

further directing said bundle of wavelengths onto said primary metropolitan fiber ring.

25. (Original) The method according to claim 24, wherein said directing to a secondary aggregation node is via one of fiber and free space optical communications.

26. (Original) The method according to claim 24, wherein said directing to a tertiary aggregation node is via one of fiber, millimeter wave radio and free space optical communications.